

Remarks

Claims 1-18, 21, and 25-30 are pending in the application. Independent claims 1, 10, and 18 have been amended herein to further clarify one of the features of the invention. Claims 16, and 27-30 have been amended to independent form. Claims 10, 16, 18, 21, and 27-30 have been amended to make minor modification of the claim language. Favorable reconsideration of the application, as amended, is respectfully requested.

I. ALLOWABLE SUBJECT MATTER

Applicants acknowledge with appreciation the allowance of claim 21. Applicants also acknowledge with appreciation the indicated allowability of claim 16 and 27-30 subject to being amended to independent form. These claims 16, and 27-30 have been amended to independent form.

Claims 10, 16, 18, 21, and 27-30 have been amended to make minor modification of the claim language. Specifically, the term "terminating" (noise from the cable plant ...) in these claims has been changed to --reducing-- to be consistent with the description of the specification. Support for this amendment is found throughout the specification, but especially at, for example, page 18, lines 1-3. It is respectfully submitted that this word change does not affect the patentability of claims 16, 21, and 27-30 which were indicated as allowable or allowed. Therefore, claims 16, 21, and 27-30 are now in condition for allowance.

For at least the following reasons, Applicants believe that other pending claims are in condition for allowance.

II. REJECTIONS OF CLAIMS 1-15, 17-18, AND 25-26 UNDER 35 U.S.C. § 103

Claims 1-5, 8-15, 17-18, and 25-26 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,160,571 ("Wang"). Claims 6-7 stand rejected under 35 U.S.C. § 103(a) over a combination of Wang and U.S. Patent No. 6,307,597 ("Bowyer"). Independent claims 1, 10, and 18 have been amended herein to further clarify one of the features of the invention. Therefore, independent claims 1, 10, and 18, and their dependent claims are believed to allowable over the cited art for at least the following reasons. Withdrawal of the rejections is respectfully requested.

Independent claim 1 has been amended herein to further clarify one of the features of the invention. Specifically, claim 1 requires that "the upstream transmitter is configured to generate the control signal for implementing one of (i) a first mode of protection from noise leakage using only the switch, and (ii) a second mode of protection from noise leakage using both the amplifier

and the switch component, depending on whether the amplifier can switch at a sufficient speed not to cause data packet collisions.” Independent claims 10 and 18 have corresponding recitations similar to those of claim 1. Support for the amendments is found at, for example, page 21, lines 3-23 of the present specification. See also the flow chart of Fig. 5. No new matter has been introduced by the amendments.

According to one specific embodiment of the invention, the upstream transmitter is capable of selecting one of two modes of protection from noise leakage, depending on whether the amplifier can switch at a sufficient speed. In one mode, only the switch is activated/deactivated by the transmitter. In another mode, both the amplifier and the switch component are activated/deactivated by the transmitter. The latter mode, which utilizes two layers (i.e., the amplifier and the switch component) of protection from noise leakage, would further isolates the cable modem as compared to the former mode. In essence, according to this specific embodiment of the invention, one of the two modes is selected depending on whether the amplifier can switch at a sufficient speed.

The Wang patent fails to teach or suggest the feature of the invention discussed above. As shown in Fig. 6, the Wang patent shows that the driver 108 and the switch 144 are controlled by the control line 112. However, nothing in the Wang patent suggests selection of two modes depending on whether the amplifier can switch at a sufficient speed as claimed. Therefore, the Wang patent cannot be said to teach or suggest at least the above-identified claimed feature.


The Bowyer patent was cited to cure the deficiencies of the Wang patent regarding integration of multiple circuit elements. The Bowyer patent is silent on two different modes of protection from noise leakage. As such, the Bowyer patent also fails to teach or suggest at least the above-described claimed feature.

For at least the reasons set forth above, none of the cited references teach or suggest at least one of the claimed features, that is, selection between the two modes depending on whether the amplifier can switch at a sufficient speed. In view of the foregoing, the inventions defined in independent claims 1, 10, and 18, and their dependent claims are believed to be patentable over the cited art. Withdrawal of the rejections is respectfully requested.

III. CONCLUSION

Applicants believe that all pending claims are in condition for allowance, and respectfully request a Notice of Allowance at an early date. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 510-843-6200, ext. 245.

Respectfully submitted,
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Limited Recognition under 37 CFR §10.9(b)

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